Part 11 · The Escape Challenge

Five gates, each a calculation. Each gives you one digit. Collect all five to unlock the exit code.

🔒 GATE 1 — The Factor Gate

Find HCF(6, 20) using prime factorisation. Take the answer.

Digit: ☐

🔒 GATE 2 — The LCM Gate

Find HCF(6, 72, 120) using prime factorisation. Take the answer.

Digit: ☐

🔒 GATE 3 — The Digit Gate

HCF(96, 404) = ? Take the answer.

Digit: ☐

🔒 GATE 4 — The Composite Gate

How many distinct prime factors does 140 have (2, 5, 7)? Take that count.

Digit: ☐

🔒 GATE 5 — The Theorem Gate

In Theorem 1.2, if a prime p divides a^2, p divides what power of a? Take the exponent (i.e. 1).

Digit: ☐

EXIT CODE: ☐ ☐ ☐ ☐ ☐

Every proof in this chapter, from HCF to √2, comes back to one fact: primes factorise a number in exactly one way. Hold onto that, and the rest follows. □√2